

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1-7, 15-18 and 20, CANCEL claims 8-14 and ADD new claims 24 and 25 in accordance with the following.

1. (CURRENTLY AMENDED) A non-contact IC card reader/writer device as recited in claim 24, further comprising:

~~antennas that perform transmission and reception of carrier waves between the non-contact IC card reader/writer device and a non-contact IC card;~~

a detector that detects the voltage level of each of the carrier waves received from the non-contact IC card via the antennas; and

~~a~~ the control unit that calculates the location of the non-contact IC card, based on the detected voltage levels detected by the detector.

2. (CURRENTLY AMENDED) A ~~The~~ non-contact IC card reader/writer device as recited in claim 24, wherein comprising:

~~antennas that perform transmission and reception of carrier waves between the non-contact IC card reader/writer device and a non-contact IC card; and~~

the a control unit that alternately drives the antennas, obtains location information from the non-contact IC card, and calculates the location of the non-contact IC card.

3. (CURRENTLY AMENDED) A ~~The~~ non-contact IC card reader/writer device as recited in claim 24, wherein comprising:

the ~~antennas that are arranged in a matrix on one plane, and perform transmission and reception of carrier waves between the non-contact IC card reader/writer device and a non-contact IC card; and~~

~~a~~ the control unit ~~that sequentially drives the antennas, and calculates the location of the non-contact IC card based on the distribution of the locations of antennas that have received a response from the non-contact IC card.~~

4. (CURRENTLY AMENDED) A The non-contact IC card reader/writer device as recited in claim 24, wherein comprising:

~~the antennas that are arranged in a matrix on one plane, and perform transmission and reception of carrier waves between the non-contact IC card reader/writer device and a non-contact IC card~~ and further comprising:

a detector that drives all the antennas at once, and detects the voltage level of each of the carrier waves received from the non-contact IC card via the antennas; and

~~a the~~ control unit ~~that calculates the location of the non-contact IC card, based on the voltage levels detected by the detector and the locations of antennas that have received the carrier waves.~~

5. (CURRENTLY AMENDED) A The non-contact IC card reader/writer device as recited in claim 24, further comprising:

~~antennas that perform transmission and reception of carrier waves between the non-contact IC card reader/writer device and a non-contact IC card;~~

a positioning sensor that optically detects the location of the non-contact IC card; and

~~a the~~ control unit ~~that detects the location of the non-contact IC card from the location information of the non-contact IC card detected by the positioning sensor.~~

6. (CURRENTLY AMENDED) A The non-contact IC card reader/writer device as recited in claim 24, further comprising:

~~antennas that perform transmission and reception of carrier waves between the non-contact IC card reader/writer device and a non-contact IC card;~~

Hall elements that are respectively provided to the antennas, and detect changes in field intensity on the plane of the antennas; and

~~a the~~ control unit that detects the location of the non-contact IC card, based on the field intensity changes detected by the Hall elements.

7. (CURRENTLY AMENDED) An input device, comprising:

a non-contact IC card reader/writer device;

antennas that perform transmission and reception of carrier waves between the non-contact IC card reader/writer device and a non-contact IC card;

a detector that detects the voltage level of each of the carrier waves received from the non-contact IC card via the antennas; and

a control unit that calculates the location of the non-contact IC card, based on the detected voltage levels detected by the detector.

8. (CANCELLED)

9. (CANCELLED)

10. (CANCELLED)

11. (CANCELLED)

12. (CANCELLED)

13. (CANCELLED)

14. (CANCELLED)

15. (CURRENTLY AMENDED) A ~~The~~ method of detecting the location of a non-contact IC card as recited in claim 25, further comprising: ~~comprising the steps of:~~
~~performing carrier wave transmission and reception with the non-contact IC card through antennas;~~

detecting the voltage level of each carrier wave received from the non-contact IC card through the antennas; and

calculating the location of the non-contact IC card, based on the detected voltage levels ~~detected in the detecting step.~~

16. (CURRENTLY AMENDED) A ~~The~~ method of calculating the location of a non-contact IC card as recited in claim 25, wherein: ~~comprising the steps of:~~

~~performing carrier wave transmission and reception with the non-contact IC card through antennas; and~~

the calculating, further, calculates the location of the non-contact IC card from location

information obtained from the non-contact IC card through alternate driving of the antennas.

17. (CURRENTLY AMENDED) A-The method of calculating the location of a non-contact IC card, ~~comprising the steps of:~~recited in claim 25, wherein:

performing the carrier wave transmission and reception with the non-contact IC card through sequential driving of antennas arranged in a matrix on one plane; and

calculating the location of the non-contact IC card, based on distribution of the locations of antennas that have received a response from the non-contact IC card.

18. (CURRENTLY AMENDED) A-The method of calculating the location of a non-contact IC card, ~~comprising the steps of:~~as recited in claim 25, further comprising:

performing the carrier wave transmission and reception with the non-contact IC card through simultaneous driving of antennas arranged in a matrix on one plane;

detecting the voltage level of each carrier wave received from the non-contact IC card through the antennas; and

calculating the location of the non-contact IC card, based on the voltage levels detected in the detecting step and the locations of antennas that have received the carrier waves.

19. (CANCELLED)

20. (CURRENTLY AMENDED) A-The method of calculating the location of a non-contact IC card, ~~comprising the steps of:~~as recited in claim 25, further comprising:

~~performing carrier wave transmission and reception with the non-contact IC card through antennas;~~

detecting a field intensity change on the plane of the antennas with Hall elements corresponding to the antennas; and

calculating the location of the non-contact IC card, based on the field intensity change detected with the Hall elements.

21. (CANCELLED)

22. (CANCELLED)

23. (CURRENTLY AMENDED) The method as claimed in claim ~~24~~24, further comprising:
detecting an input operation performed on a touch pad by an operator; and
outputting input information detected from the touch pad, in response to a request issued from the outside device.

24. (NEW) A non-contact IC card reader/write device, comprising:
antennas that perform transmission and reception of carrier waves between the non-contact IC card reader/writer device and a non-contact IC card; and
a control unit processing signals obtained from the antennas and calculating a location of the non-contact card.

25. (NEW) A method of detecting the location of a non-contact IC card, comprising:
performing carrier wave transmission and reception with the non-contact IC card through antennas; and
processing signals obtained from carrier waves received by the antennas and calculating a location of a non-contact IC card.